



PUBLIC HEALTH DIVISION
Drinking Water Services
Tina Kotek, Governor

Oregon
Health
Authority

750 SE Emigrant Ave., Suite 150
Pendleton, OR 97801
(541) 276-8006
FAX (541) 276-4778
www.healthoregon.org/dwp

February 1, 2024

Tofor Snider, PE
QRS Consulting, LLC
3380 Americana Terrace, Suite 220
Boise, Idaho 83706

**Re: New ASR2 Well, Plan Review #41-2020, Baker City, PWS ID #4100073
Final Approval**

Dear Tofor:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) that confirmed the new well was constructed according to the approved plans. **Final approval for the new well is granted and it may be placed into service.**

The well construction was reviewed by our staff hydrogeologist who provided the following comments:

Well BAKE 52777/L128841 is sealed to a depth of 312 feet below ground surface (bgs) with 120 sacks of bentonite and 757 sacks of cement. Based on calculations using the Oregon Water Resources Department (OWRD) Well Sealing Requirement #3 calculator, a minimum of 119 sacks of bentonite and 179-237 sacks of cement were needed to seal the well. The well driller used an adequate amount of sealant and the well appears to meet OWRD's well construction standards. The well is constructed into a confined aquifer. Water supplying the well was first encountered at a depth of 329 feet bgs and the static water level (SWL) was measured at 86 feet bgs. The change in SWL is an indication that the aquifer is under pressure and considered confined unless other information is presented to indicate otherwise.

I also have the following comments:

1. The application to waive the setback standard to allow the storage of golf carts within 100 feet of the well was reviewed and approved. A copy of the waiver is enclosed.

2. I note that samples collected from the new well have tested positive for total coliform bacteria. It is my understanding remedial actions will be taken and the well will be resampled in an attempt to obtain negative results. As long as the well does not test positive for *E. coli*, the chlorination treatment at the well is considered sufficient even if the total coliform detections persist.
3. I note that the manganese sample result of 0.110 mg/L is over the secondary maximum contaminant level of 0.05 mg/L and under the lifetime health advisory level of 0.3 mg/L. A FAQ on manganese in drinking water is online here:
<https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/DRINKINGWATER/OPERATIONS/Documents/manganese-faq.pdf>
4. Please contact me when the well is ready to be placed into service. The long-term sampling schedules for the well will be provided at that time.
5. Please submit the make/model of the well pump and the depth the pump bowls are set.

If you have any questions or would like this in an alternate format, please feel free to call me at (541) 966-0900 or email at william.h.goss@oha.oregon.gov .

Sincerely,



William Goss, PE
Regional Engineer

encl: waiver application form

c: Julie Wray, OHA–DWS, Portland, OR
Dennis Bachman, Baker City
David Stangel, PE, Consor Engineering (pdf copy only)
Robyn Cook, GSI Water Solutions, Inc. (pdf copy only)
Tommy Laird, Oregon Water Resources Department (pdf copy only)